NORTEL NETWORKS

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Raymond L. Strassburger
Director,
Government Relations-
Telecommunications Policy

January 22, 1999

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20544

EX PARTE NOTICE

Re: Ex Parte Presentation, *Deployment of WirelineServices Offering Advanced Telecommunications Capability* CC Docket No. 98-147; *Inquiry Concerning the Deployment Of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion* CC Docket No. 98-146

Dear Ms. Salas:

Pursuant to Section 1.1206 of the Commission's rules this letter, which includes two copies for each referenced proceeding, is notification that on January 22, 1999 representatives of Nortel Networks met with the following FCC personnel concerning issues in the referenced proceedings: Kathy Brown; Commissioner Ness and Linda Kinney; Commissioner Furchtgott-Roth, Paul Misener, Kevin Martin, Bill Trumpbour; Paul Gallant, Office of Commissoner Tristani; and Commissioner Michael Powell, Paul Jackson, and Kyle Dixon. At all the meetings, Mr. F. William Conner, Executive Vice President, Marketing and Communications; Martha V. Carucci, Manager, Government Relations, Telecommunications, and the undersigned represented Nortel Networks.

Enclosed for inclusion in the records of these proceedings are the written materials that were provided to the FCC meeting participants and on which Nortel Networks' presentations were made.

If you need additional information, please communicate with the undersigned.

Sincerely,

Raymond L. Strassburger
Director, Government Relations-Telecommunications Policy

RLS/kc

Enclosures

cc: Kathy Brown, Chief of Staff
Commissioner Susan Ness
Linda Kinney
Commissioner Harold Furchtgott-Roth
Paul Misener
Kevin Martin
Paul Gallant, Office of Commissioner Gloria Tristani
Commissioner Michael Powell
Kyle Dixon
Paul Jackson

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Commission Steps to Ensure the Availability of Advanced Services to All Americans

Nortel Networks shares the goal of the Commission and Congress in facilitating the timely, robust, competitive and ubiquitous deployment of Advanced Services in the United States. In this manner, all Americans can enjoy the manifold benefits of high-speed access to the Internet.

The technology exists today for making these services available, but the Commission must be vigilant to avoid creating, and affirmatively remove, artificial regulatory barriers to the economic deployment of these services.

In order for this vision to become a reality, the Commission must ensure the participation in the marketplace of three sets of entities – the Incumbent Local Exchange Carriers (ILECs), the Competitive Local Exchange Carriers (CLECs) and the Equipment Manufacturers.

There are affirmative steps the Commission should take in its Section 706 Proceedings and elsewhere that will allow each of these stakeholders to contribute to a vibrant market for Advanced Services:

ILECs: the Commission should permit these carriers to deploy integrated solutions that allow these carriers to pass along to their customers the full benefits of using the embedded infrastructure. Any separate subsidiary requirement should not mandate the use of separate facilities, but instead should incorporate non-structural safeguards, including virtual collocation via integrated voice/data cards.

CLECS: the Commission should ensure that these carriers can compete in the provision of Advanced Services by requiring that non-loaded unconditioned loops be made available promptly by the ILECs. In addition, to allow CLECs to provide integrated Advanced Services, the CLECs should be permitted to physically collocate integrated switching/multiplexing equipment, and "loop share" when virtual collocation through integrated voice-date cards is employed.

Equipment Manufacturers: the Commission should revise Part 68 to accommodate the new technology for Advanced Services and ensure compatibility between these Advanced Services and existing services. In the meantime, the Commission should promptly grant waivers of Part 68 provisions when the manufacturer demonstrates that the equipment is compatible with current services.

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How the world shares ideas.

Policy Recommendations for Volume Deployment of Advanced Services

Gary Bolton
Nortel Networks

Executive Summary

This paper summarizes Nortel Networks' recommendations on the direction that the FCC should pursue for setting policy in the NPRM proceedings. The following discusses our view on the guidelines for successful volume deployment of Advanced Services and our recommendation on the appropriate model to speed availability and promote competition.

Policy Recommendations for successful deployment of Advanced Services

1. Policies must allow Network and Services providers to deploy the most cost effective and efficient architectures to ensure that the FCC can realize the following results:
   - Accelerate the availability of Advanced Services to all Americans
   - Ensure that Advanced Services can be offered at the lowest possible prices so that these services are affordable to all Americans
   - Enable cost structures that allow Network and Services providers to deploy Advanced Services to rural schools, libraries and consumers that would otherwise be excluded in the service area footprint due to business case economics
   - Foster competition by allowing both Incumbents and new entrants to sustain viable business cases
   - Allow Network and Service providers to deploy efficient and cost effective products and to be able to leverage all the features, functionality and capabilities of their capital investments.
   - Maximize the use of the embedded infrastructure, rather than requiring duplication of plant, facilities and operations
2. Policies must provide a level playing field to promote and encourage competition.
3. Policies must ensure that Advanced Services are compatible with existing and future services deployed in the Network, i.e. do not cause interference
4. Policies must not penalize or constrain innovative Advanced Service products, technologies and architectures which speed deployment, lower cost, increase performance and are more network friendly.
5. Policies must require that facilities such as non-loaded "unconditioned loops" be made immediately available upon request at the lowest possible cost.

Nortel believes that these requirements are critical to speeding volume deployment, availability and affordability of Advanced Services to all Americans. Our NPRM comments and ex parte meetings to date have been based around the following four areas which are fundamental to these requirements:

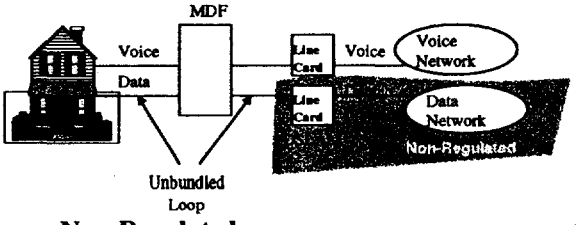
Summary of Nortel's NPRM Comments

1. **Deployment of Integrated Solutions**
   - There should be no regulatory impediments to the deployment of efficient Integrated Solutions which leverage the existing loop plant and equipment infrastructures
2. **Co-location of Integrated Switching Equipment**
   - If equipment used to provide access to unbundled network elements has additional functionality such as switching, this functionality may be turned on and used for that capability
3. **Loop Access**
   - Access to loops is critical to enabling competition and the deployment of Advanced Services. Non-loaded, unconditioned loops are readily identifiable and should be made immediately available upon request.
4. **Grant Part 68 Waivers**
   - Under circumstances appropriately defined by the Commission, the FCC should grant waivers of Part 68 for Advanced Services CPE.

Nortel's four fundamental areas of concern are rooted in basic economics. Cost to the subscriber is a significant market factor. We strongly believe that regulatory policy must foster the most cost effective and efficient architectures and deployment options to speed deployment and availability of Advanced Services to all Americans. The growth of competition is directly impacted by new entrants' ability to sustain viable business cases. Incumbents are less likely to deploy services and cooperate if the regulatory environment unfairly allows competitors to benefit from the Incumbent's infrastructure investment without incurring associated risk.

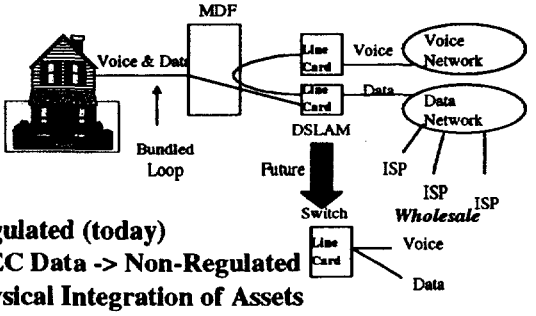
In the diagrams below, two different ILECs have chosen different Advanced Services deployment models in response to their perspective views on the direction of the FCC policies.

Separate Affiliate Model



- **Non-Regulated**
- **Separate Data Affiliate &**
- **Physical Separation of Assets**

Integrated Wholesale Model



- **Regulated (today)**
- **ILEC Data -> Non-Regulated**
- **Physical Integration of Assets**

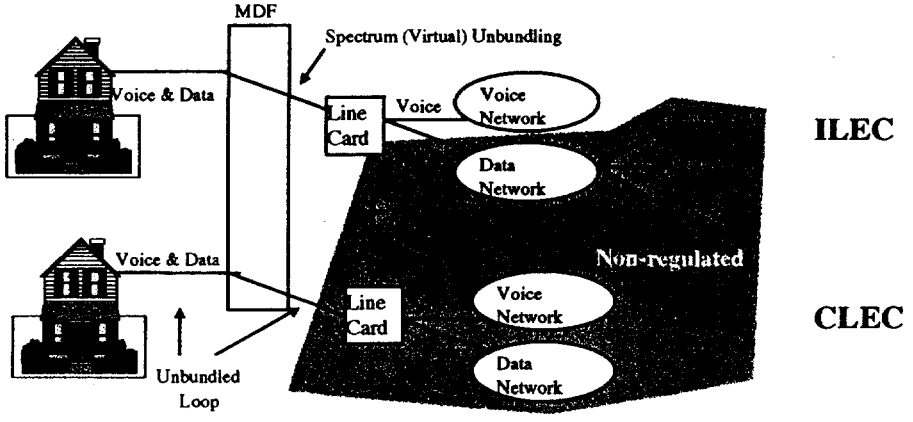
Figure 1

In the Separate Affiliate Model, the ILEC has elected to establish a separate Data Affiliate and establish a physical separation of assets. This model requires the ILEC Data Affiliate to operate under the same environment and rules as a CLEC to gain access to unbundled loops and co-location space. From a level playing field perspective, the ILEC Data Affiliate faces the same constraints as a CLEC. However this model creates significant economic inefficiencies. Not only is the separate affiliate required to duplicate facilities and operations, a new loop is required for every Advanced Service subscriber. This will result in more costly deployment than necessary and the availability of Advanced Services will eventually be severely limited by exhaustion of the available loop plant.

The Integrated Wholesale Model makes very efficient use of the loop plant (voice and data are carried over the same loop), capital equipment and operations. The ILEC, in this model, avoids having to unbundle network elements by managing the access and providing the service at wholesale to its Data Affiliate ISP and other competitive ISPs. This is a regulated service and the access cost is passed along to the ISP. This model sets a price floor to the subscriber since the ISPs must pass along this access cost and compete on the incremental service price. In this model, CLECs are still limited to requesting unbundled loops and are usually not allowed to co-locate switching equipment. As a result, there is no incentive to lower the access cost.

In efforts to maximize economics and promote competition, Nortel recommends that the FCC policy enable the following deployment model.

Fully Integrated Model



- **Non-Regulated Data**
- **No Physical Separation of Assets**
- **Co-location of Integrated Switching Equipment**
- **Promotes Competition**
- **Maximum Economic Efficiency**
- **Maximum Leverage of Loop Plant and Facilities**

Figure 2

The fully integrated model allows both the ILEC and CLEC to obtain the maximum network efficiency at the lowest possible deployment cost. Both the ILEC and CLEC can maintain the integrity of their full access infrastructure and can gain the maximum return on their capital investment by leveraging all the vertical functionality and capabilities of their equipment.

In this arrangement, if a CLEC is providing only the data service to the subscriber and the voice service remains with the ILEC, the CLEC gains access to the data channel component of the local loop through what amounts to loop sharing. Conventional virtual collocation can be used to install the integrated voice-data line card into the Incumbent's existing loop access equipment (switch peripheral or DLC). Loop sharing is enabled by by the integrated voice-data line card inserted into the Incumbent's existing access equipment. If the CLEC wishes to provide both voice and data service to the subscriber over the same loop, in order to be at equipment cost parity with the ILEC, the CLEC must be able to collocate the same integrated switching multiplexing equipment for the voice-data line card as the ILEC uses.

The fully integrated model means Americans will significantly benefit through the lowest possible prices and widest possible availability of Advances Services.

Two further elements are key to the success of this model. The first is to ensure that non-loaded, unconditioned loops are provided immediately upon request. Nortel has provided the FCC with significant data that products and technologies are currently available that are robust enough to be deployed on unconditioned loops.

The other key element is that the FCC must ensure that the integrity of existing and future of services in the network are protected from interference and damage from non-compatible services. By establishing spectral compatibility standards and issuing Part 68 waivers to products that are deemed to be network friendly, the FCC can alleviate many of the issues which will slow the deployment of Advanced Services.

In summary, Nortel strongly supports the FCC's efforts in accelerating the deployment and availability of Advanced Services to all Americans. We strongly believe that to speed deployment, promote competition and to make Advanced Services available and affordable to all Americans, the FCC must carefully consider the network economics that will result from the regulatory policy.

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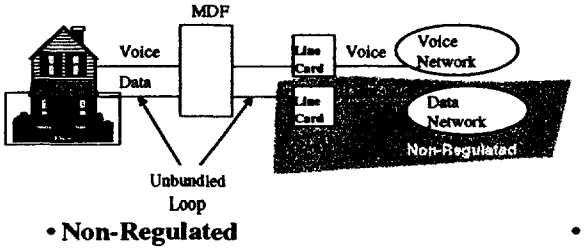

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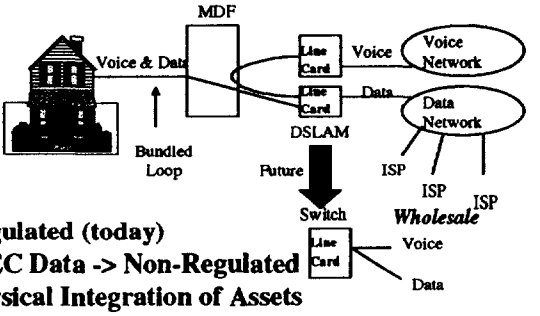

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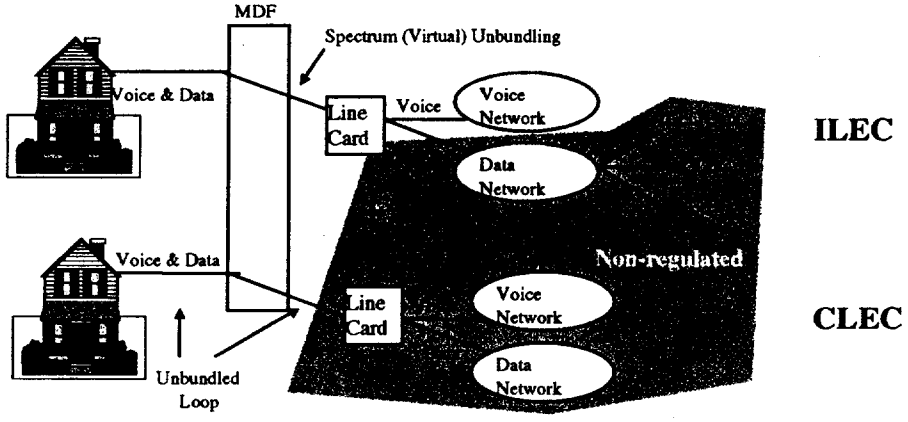

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